

Remarks

Applicant thanks the Examiner for the careful examination of this application and the clear explanation of the rejections.

The amended title is clearly indicative of the invention to which the claims are directed.

The amended specification now recites the claim of priority.

The new claims "particularly point out and distinctly claim the subject matter the applicant regards as his invention."

Independent claim 7 defines an integrated circuit comprising a substrate on which are functional circuitry, serial scan paths, output devices, and control circuitry.

The substrate is made of semiconductor material.

The functional circuitry includes functional registers providing stimulus outputs to the functional circuitry and response inputs from the functional circuitry.

There are at least two serial scan paths formed of the functional registers. Each scan path has a serial scan input and a serial scan output.

There are at least two output devices. Each output device has a data input connected to the serial scan output of one scan path and has a data output. The data outputs of both output devices are connected together. Each output device has a control input for selectively connecting a data signal at its data input to its data output.

Scan path control circuitry has at least two separate control output leads. Each control output lead is connected to one of the scan paths and to the control input of the output device connected to that scan path. The scan path control circuit includes a state machine. The state machine has state circuitry providing:

- i. an Idle state;
- ii. a Capture state; and
- iii. at least a first Shift state and a second Shift state, there being only one Shift state for each scan path.

Present independent claim 7 includes language positively reciting the output devices, the state machine and the state machine circuitry providing the Idle, Capture, first Shift, and second Shift states. These are limitations not taught or suggested by the claims of US 6,519,729.

Applicant agrees with the Action that US 6,519,729 fails to teach or disclose a state machine having an Idle state, a Capture state, and a Shift state for each scan path. Applicant believes that a rejection under obvious-type double patenting limits the obviousness comparison to the claims of the one patent.

Here the rejection is based on the claims of US 6,519,729 and the text of US 6,779,133. Applicant submits that this is improper.

Even if reference to the text of US 7,779,133 was proper, for argument, the cited text of that patent fails to disclose the separate scan paths, the output devices, and the separate Shift states of new claim 7.

The present claims distinguish over the claims of US 6,519,729 to Whetsel.

The application is in allowable form and the claims distinguish over the cited references. Applicant respectfully requests reconsideration or further examination of this application.

Respectfully Submitted,

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